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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,485	02/12/2001	Junichi Koshiba	Q63128	8114

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SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

VO, HAI

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/780,485

Applicant(s)

KOSHIBA ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 3-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mouri et al (US 5,147,477). Mouri teaches a foamed rubber having a hardness of 47 (column 15, line 60), and an average cell diameter of 32 microns (table 12) within the claimed ranges. The cell is formed by azodicarbonamido, the same blowing agent used by Applicants (table 7, E-XVIII). Likewise, it is clearly apparent that the blowing agent must have a decomposition temperature required by the claims. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. Mouri teaches a pneumatic tire comprising a bell 7 and a tread integrally bonded to each other (figure 1). The bell is corresponding to the claimed a rigid body. Mouri does not specifically disclose a density of the foam rubber. However, it appears that the foamed rubber of

Mouri is made of the same composition as that of the present invention (natural rubber, butadiene rubber and additives). The foamed rubber of Mouri has a smooth surface, the cell diameter, hardness, tensile strength within the claimed ranges.

Additionally, the cell is formed by the same blowing agent as disclosed by the present invention. Further, the cell diameter, hardness and tensile strength altogether dictate the foamed density, it is the examiner's position that the foamed rubber of Mouri would inherently possess the density within the claimed range. Note **In re Best** 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made under 35 USC 102. It is the examiner's position that Mouri anticipates or strongly suggests the claimed subject matter.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mouri et al (US 5,147,477) in view of Sandstrom et al (US 5,216,006). Mouri does not specifically disclose the foamed rubber composition comprising EPDM. Sandstrom discloses the tread portion of the tire comprising modified EPDM to provide the tread with improvements in ozone resistance and aged or weather resistance (example 4), which is important to the invention of Mouri, thus suggesting the modification. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the modified EPDM into the foamed rubber composition motivated by the desire to the tread with improvements in ozone resistance and aged or weather resistance.

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mouri et al (US 5,147,477) in view of Boustany et al (US 3,802,478). Mouri does not specifically the Young's modulus of the belt. Therefore, it is necessary and thus obvious for the skilled artisan to look to the prior art for the Young's modulus of the belt of the pneumatic tire. Boustany teaches the belt which is a reinforcing member having a Young's modulus of in the range 57500 psi or 396 Mpa (column 9, line 6), meeting the range set out in the claims. Boustany discloses the reinforcing member comprising matrix of polyamides and cellulose fiber (column 3, lines 20-40). This reads on the rigid body being made of a crystalline resin and fibers. In the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the belt having a Young's modulus within the range instantly claimed, motivated by the desire to make the tread run flatter and give better road contact and thus increasing the overall life-wearing characteristics of the tire, which is important to the invention of Mouri, thus suggesting the modification. The motivational statement is taken from the prior art US 4,196,764, column 1, lines 5-10.
6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mouri et al (US 5,147,477) in view of Boustany et al (US 3,802,478) as applied to claim 10, further in view of JP 02-206629. Mouri does not specifically disclose the foamed rubber for tire tread comprising an acrylic acid metal salt. JP'629 discloses the rubber composition for tire tread comprising an acrylic metal salt to give the tire having excellent dimensional accuracy and improved extrusion moldability

(abstract), which is important to the invention of Mouri, thus suggesting the modification. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the acrylic metal salt in the foamed rubber motivated by the desire to give the tire having excellent dimensional accuracy and improved extrusion moldability.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 2, 8-11 have been considered but are moot in view of the new ground(s) of rejection.
8. The art rejections in the Office Action mailed on 05/30/2003 have been overcome by the present amendment and response (see pages 7 and 8 of the amendment filed on 08/27/2003).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on M,T,Th, F, 8:30-6:00 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV

Hai V.
AU 1771